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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,094	03/10/2004	Keijiro Take	249299US-6 DIV	2328
22850	7590	02/09/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			PHAN, TRI H	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	
			2661	

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/796,094	TAKE, KEIJIRO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tri H. Phan	2661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/156,703 filed on 09/18/1998 (US 6,477,158).
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/27/2005</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Amendment/Arguments*

1. This Office Action is in response to the Response/Amendment filed on October 21<sup>st</sup>, 2005. Claims 1-8 are now canceled and new claims 9-20 are added. Claims 9-20 are now pending in the application.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nakamura et al.** (U.S.5,740,168; hereinafter refer as ‘**Nakamura**’) in view of **Hamalainen et al.** (U.S.6,148,209; hereinafter refer as ‘**Hamalainen**’).

- In regard to claims 9 and 11, Nakamura discloses about *the radio communication method for a radio communication system employing ‘CDMA’ Code Division Multiple Access for radio access and providing multi-rate transmission, the radio communication system including a base station controlling apparatus (‘base station control unit 17’ in figure 2A), a plurality of base stations (‘transceiver units 15<sub>1</sub>,...,N’ in figure 2A), and a plurality of mobile*

*stations ('mobile station' in figure 3A), the radio communication method comprising the steps of informing that a first code being used by one of the plurality of mobile stations is to be switched to a second code (see S7 in figure 4; col. 6, lines 36-38 wherein, it is obvious that the 'being used spreading code is the "first code" and the new spreading code is the "second code"); transmitting timing information (switching timing) to the one of the plurality of mobile stations by message (see S17 in figure 4; col. 6, lines 52-59), said timing information including an integer representing a frame at which the first code is switched to the second code (see spreading code switching in figures 6-19; where the unique words in each frame is used for setting up the switching timing in prescribed frames as disclosed in N frames and M frames in figure 6; col. 8, line 64 through col. 9, line 12; or using frame number as disclosed in figure 16; col. 14, lines 7-17, or using flag in each frame for period of time in boundary of frames as disclosed in figures 8-15; col. 11, lines 50-59; and where the number or sequence of frames are integer); switching the first code to the second code at the one of the plurality of mobile stations, said step of switching the first code based on the step informing and on the transmitted timing information; step of switching a transmission code from the first code to the second code at the one of the plurality of base stations in synchronization with switching the first code to the second code at the one of the plurality of mobile stations (see S23 and S25 in figure 4; col. 6, line 65 through col. 7, line 12; col. 7, lines 28-32).*

Nakamura does disclose about the completion message of switching the first code to the second code in the transceiver unit of the base station and the transceiver unit of the mobile station to the respective control units as disclosed in col. 7, lines 13-16; but Nakamura lacks what Hamalainen discloses *wherein the completion message is transmitted from the one of the*

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*plurality of mobile stations to the base station controlling apparatus* (see 'assignment complete' in figure 6; 'handover com/assignment com' in figure 7; col. 7, lines 23-26; and col. 8, lines 14-26. See also col. 5, lines 46-48 where Nakamura teaches the base station system BSS comprises the base station controller BSC and base stations BTS and the tasks of the BSC).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to send a complete message from the mobile station to the base station and the base station controller as taught by Hamalainen in the system of Nakamura, in order to notify the base station controller that the assigned task has been completed.

- Regarding claim 10, in addition to features in base claim 9 (see rationales pertaining the rejection of base claim 9 discussed above), Nakamura further discloses about *releasing the first code* (for example see col. 2, lines 9-11 where the first code is released when the switching is completed).

- In regard to claims 12 and 14, Nakamura discloses about *the radio communication method for a radio communication system employing 'CDMA' Code Division Multiple Access for radio access and providing multi-rate transmission, the radio communication system including a base station controlling apparatus* ('base station control unit 17' in figure 2A), *a plurality of base stations* ('transceiver units 15<sub>1</sub>,...,N' in figure 2A), *and a plurality of mobile stations* ('mobile station' in figure 3A), *the radio communication method comprising the steps of informing that a first code being used by one of the plurality of mobile stations is to be switched to a second code* (see S7 in figure 4; col. 6, lines 36-38 wherein, it is obvious that the 'being used

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spreading code is the “first code” and the new spreading code is the “second code”); *step of transmitting timing information* (switching timing) *by message to the one of the plurality of mobile stations* (see S17 in figure 4; col. 6, lines 52-59), *said timing information regarding timing of switching the first code to the second code stations* (see spreading code switching in figures 6-19; where the unique words in each frame is used for setting up the switching timing in prescribed frames as disclosed in N frames and M frames in figure 6; col. 8, line 64 through col. 9, line 12; or using frame number as disclosed in figure 16; col. 14, lines 7-17, or using flag in each frame for period of time in boundary of frames as disclosed in figures 8-15; col. 11, lines 50-59; and where the number or sequence of frames are integer); *step of switching the first code to the second code at the one of the plurality of mobile stations, said step of switching the first code based on the step informing and on the transmitted timing information; step of switching a transmission code from the first code to the second code at the one of the plurality of base stations in synchronization with switching the first code to the second code at the one of the plurality of mobile stations* (see S23 and S25 in figure 4; col. 6, line 65 through col. 7, line 12; col. 7, lines 28-32).

Nakamura does disclose about the completion message of switching the first code to the second code in the transceiver unit of the base station and the transceiver unit of the mobile station to the respective control units as disclosed in col. 7, lines 13-16; but Nakamura lacks what Hamalainen discloses *wherein the completion message is transmitted from the one of the plurality of mobile stations to the base station controlling apparatus* (see ‘assignment complete’ in figure 6; ‘handover com/assignment com’ in figure 7; col. 7, lines 23-26; and col. 8, lines 14-

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26. See also col. 5, lines 46-48 where Nakamura teaches the base station system BSS comprises the base station controller BSC and base stations BTS and the tasks of the BSC).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to send a complete message from the mobile station to the base station and the base station controller as taught by Hamalainen in the system of Nakamura, in order to notify the base station controller that the assigned task has been completed.

- Regarding claim 13, in addition to features in base claim 12 (see rationales pertaining the rejection of base claim 12 discussed above), Nakamura further discloses about *releasing the first code* (for example see col. 2, lines 9-11; where the first code is released when the switching is completed).

- In regard to claims 15-17, claims 15-17 are apparatus claims that have substantially the same limitations as the respective method claims 9-11. Therefore, they are subject to the same rejection.

- In regard to claims 18-20, claims 18-20 are apparatus claims that have substantially the same limitations as the respective method claims 12-14. Therefore, they are subject to the same rejection.

***Response to Amendment/Arguments***

4. Applicant's arguments filed on October 21<sup>st</sup>, 2005 with respect to claims 9, 12, 15 and 18 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Nobuyasu et al.** (U.S.6,597,673 is also cited to show devices and methods for improving the CDMA handoff control in the telecommunication architectures, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (571) 272-3126.

**Any response to this action should be mailed to:**

**Commissioner of Patents and Trademarks**  
Washington, D.C. 20231

**or faxed to:**

**(571) 273-8300**



Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tri H. Phan  
February 5, 2006



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